ERGEG
Report on
The Customer Switching Process

Ref: E05-CFG-02-06
30 September 2005

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Executive Summary

This report, one of three reports prepared for the ERGEG Customer Focus Group (CFG)[1], summarizes and analyses responses by 22 ERGEG members to a questionnaire designed and distributed by the CFG's Consumer Protection and Customer Switching Task Force (CPCSTF) between April and June 2005.

The report covers the rules and practices characteristic of the customer switching processes in the ERGEG member countries. The report considers how things have changed, how they are now, what they have achieved (especially in terms of switching activity) and how they should and will be in the foreseeable future. The report looks at both electricity and (where appropriate) gas markets[2] and focuses on household customers as well as small and medium size enterprises[3]. These customer groups are considered most vulnerable within liberalized energy markets. The report is, furthermore, evaluative but non-judgmental and simply reports on what is stated by the questionnaire respondents.

The report illustrates the reality that although Europe is deregulating at differing speeds and to differing extents, conversion is taking place as July 2007 approaches. Nevertheless, the report finds that despite many similarities between the processes in the various respondent countries, there remains substantial variation. Key differences relate, for instance, to: the time it takes to switch; the number of parties who need to be contacted by the customer in the event of a switch; the ability of the customer to switch at a suitable time without the hindering need for additional meter readings; the capabilities of the switching process IT infrastructure; and the quality of consumption / load profiling and essential switch-related information and its availability to competing suppliers.

The report also identifies a number of apparent obstacles to switching including for instance: some of the differences mentioned above; incumbent (e.g. supplier of last resort) privileges and obstructive practices; customer black-balling; the onus put on the customer to initiate the switch; and the regulation of end-user prices. Perhaps as a consequence of the above issues, there are apparently very large differences between the levels of switching being experienced in each of the European countries studied. However, although significant obstacles to switching clearly seem to exist, the regulators themselves are broadly aware of them and a number of regulators are already planning or implementing actions to tackle obstacles to switching.

[1] The other two reports focus on Customer Protection and Price Transparency.

[2] Although far less response data exists for the gas markets.

[3] It should be noted though, that definitions of small and medium enterprises vary greatly around Europe.

Preface

At the beginning of March 2005, the European Regulators Group for Electricity and Gas (ERGEG) approved in its meeting the Work Programme 2005 for ERGEG. In the Work Programme, a new focus group – Customer Focus Group – was established. The Focus Group is mandated to evaluate and develop best practice for three areas, which are: customer protection related measures as stated in the Electricity and Gas Market Directives; switching processes; and the transparency of energy prices in contracts, energy bills, advertisements and commercials.

The work has been undertaken by the Customer Focus Group and the Consumer Protection and Customer Switching Task Force subordinate to it.

This report examines the switching procedures in place at a national level in the electricity and gas retail markets. Accordingly the focus is on small and medium-sized customers. The perceived obstacles to switching as well as the levels of switching activity have been reviewed as well. The report is based on the answers provided by the member countries' energy regulatory authorities to a questionnaire prepared by the Consumer Protection and Customer Switching Task Force.

I want to express my thanks to the members of the Focus Group and Task Force for their active and knowledgeable participation in the preparation of the report. Last but not least, I wish to express my special thanks to VaasaEmg and its excellent researcher Dr. Philip Lewis who has helped the Task Force through the compilation of the report.

Asta Sihvonen-Punkka
Chairwoman of the Customer Focus Group

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1. Introduction

1.1. Background

1.1.1. The mandate of the Customer Focus Group

The European Regulators Group for Electricity and Gas (ERGEG) is the route by which the European regulators provide formal advice to the European Commission. ERGEG's 2005 Work Programme reflects ERGEG's goals and the regulators' view of the Commission's expectation of ERGEG in 2005.

ERGEG's work for 2005 has been organized across three work groups called Focus Groups: The Electricity Focus Group; the Gas Focus Group; the Customer Focus Group. The work in the Customer Focus Group has been organized through a task force called the Consumer Protection and Customer Switching Task Force.

The work of the Customer Focus Group and its Consumer Protection and Customer Switching Task Force concentrates on three areas, which are customer protection, customer switching and transparency of prices in the electricity and gas markets. The focus has been on retail markets consisting of small and medium-sized customers.

As regards the area of customer protection, the Directives 2003/54/EC and 2003/55/EC provide for the protection of households and small businesses through the right to use universal services, i.e. the right to energy supplies at reasonable and transparent prices. Article 3 and Annex A of the Directives lay down in detail measures of customer protection. The evaluation of if and how the Directives have been implemented in each single member state so far is one of the main tasks of the Customer Focus Group and it's Consumer Protection and Customer Switching Task Force.

Another important issue is the development of a best practice solution for the switching process. The possibility to switch to a new supplier within a short period of time and without obstacles and disadvantages for the customer is an essential pre-requisite for a functioning and efficient market. Furthermore, in order to allow customers to choose between different energy suppliers, transparency of prices is also needed. Without easy verification of energy prices, separated from other components such as use-of network prices or taxes, it is impossible to make a useful price comparison.

1.1.2. The CFG report on the customer switching process

This report, one of three reports of the Customer Focus Group, summarizes and analyses responses by the ERGEG members to a questionnaire designed and distributed by the Consumer Protection and Customer Switching Task Force.

The report focuses on the rules and practices characteristic of the customer switching processes in the ERGEG member countries. The report considers how things have changed, how they are now, what they have achieved (especially in terms of switching activity) and how they should and will be in the foreseeable future.

The report focuses on both electricity and, where appropriate, also gas (although far less response data exists for gas). Unless otherwise stated, the results are therefore assumed to refer to electricity and gas, although the results are believed to reflect the situation in the electricity market more than the gas market.

The main focus is on household customers as well as small and medium-sized enterprises[4]. These customer groups are considered most vulnerable within liberalized energy markets.

This report, whilst comprehensive to the extent facilitated by the responses to the questionnaire, is nevertheless only seen as an overview. It should also be noted that this report is evaluative but non-judgmental and essentially simply reports on what is stated by the questionnaire respondents. It will be a separate task for the Focus Group and the Task Force to produce a best practice proposition on the process of customer switching. Obviously, information gained from this status of affairs report will be used in that work.

Examples used within this report are not meant to indicate best practice, but rather different approaches to the issues concerned. In most cases the examples used represent the more comprehensive responses to questions (often all comprehensive responses are used as examples).

1.1.3. The customer switching processes questionnaire

The Customer Switching Processes Questionnaire (referred to later in this report as the CSP Questionnaire) was designed in April 2005 and was distributed to ERGEG member countries' energy regulatory authorities for completion and return. The latest date accepted for responses was June 1st 2005.

The questionnaire comprised 8 sections containing a variety of questions concerning the issue of customer switching. The sections were as follows:

- Overview of the pre-liberalized situation
- The Customer switching process
- Metering requirements
- Electronic data interchange
- Obstacles for customer switching
- Plans and programmes to enhance and simplify the switching process
- The level of switching activity
- Other issues relevant for switching

[4] It should be noted, though, that definitions of small and medium enterprises vary greatly around Europe.

1.1.4. Responses to the CSP questionnaire

Altogether 22 countries responded to the CSP questionnaire. These were: Austria, Denmark, Estonia, Finland, France, Great Britain, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, The Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and Turkey.

It should also be noted that because the level of electricity and gas market liberalization varies substantially between these countries, some questions are less relevant to certain countries. This fact, together with the varying degree of regulatory involvement and control in the various countries, as well as variations in respondents' time resources when completing the questionnaire, mean that the amount of response information gathered from each country, and for each question, varies significantly.

Despite the availability of the ERGEG's draft guidebook of definitions (applied wherever possible to this report), some challenges remain concerning clarity in this field of research. Efforts have been made to achieve consistency in terminology and meaning, but some anomalies may remain due to the extremely wide range of terminology applied within responses to the questionnaire.

2. Research Findings

2.1. Importance and Availability of Choice

2.1.1. The role of customer switching within an efficient deregulated energy market

The level and rate of customer switching is not singularly a direct measure of market success, but a lack of customer switching may indicate market inefficiency.

From an economic and regulatory perspective, primary objectives of electricity and gas market liberalization are to facilitate efficient utilization of the available electricity and gas resources in the short run and efficient development of the sector in the long run.

A crucial point related to short term efficiency is that producers and consumers realize the actual scarcity of electricity and gas, which is embedded in electricity and gas prices. Price signals stimulate consumption when prices are low and vice versa. With this in mind, competitive retail markets are expected to transfer electricity and gas from wholesale to retail at low margins. However, margins will only stay low if consumers penalize inefficient suppliers by switching to competitors with lower margins.

Whilst price (savings) is generally the main driver behind customer switching, it can furthermore be seen that through exercising their freedom of choice, customers encourage suppliers to appropriately and cost-efficiently provide levels of customer service, environmentalism and ethics which customers deem acceptable or even desirable. In these ways, customer switching can effect efficient improvements for individuals and society through free market mechanisms.

Within the deregulated European electricity environment an increasing number of consumers are now actively exercising their choice and thus influencing their electricity bill by either switching supplier or persuading the existing supplier to agree a more attractive contract. However, benefits afforded to customers who merely re-negotiate are rarely as generous as those achieved by customers who switch supplier and can be seen as a barrier to true competition. With this in mind it is important to note that (as illustrated later in this report) except for a few notable exceptions, true switching levels (levels of switching between suppliers) within Europe are generally still very low amongst small and medium users in liberalized electricity and gas markets. This can be partially attributed towards customer passiveness, an absence of attractive competitive offers and the inherent nature of utilities, but it can also be seen as a reflection of challenges facing the regulation of competition within liberalized energy markets. These challenges include the simplification of switching procedures, the education of customers and the elimination of incumbent privileges.

Greater levels of switching are therefore likely to be an indication of the level of customer awareness, the simplicity of switching processes and the opportunity for non- incumbent suppliers to compete with incumbent suppliers on fair and equal terms. Low levels of switching indicate that customer awareness, switching processes and terms of competition (e.g. profit margins) are not suitable for the facilitation of competition. Under such low switching circumstances the market operates inefficiently since customers apparently willingly accept even substantial negative effects of their inactivity, such as higher prices and lower service levels.

2.1.2. Timetable allowed for enabling eligibility[5] (liberalization timetables)

Customer switching can only take place under liberalized conditions. Most of the countries sampled have now liberalized their markets for electricity and (where relevant) gas, at least for all non-household customers. Many of them even now have several or more years of full liberalization experience. Many customers however, are still not eligible for choice.

2.1.2.1. Concerning Electricity:

Full liberalized markets include Austria, Denmark, Finland, Great Britain, Ireland, Netherlands, Norway, Portugal (with some limitations), Spain, Sweden and others not included within this research such as Germany and Belgium.

Countries liberalized for all except household customers include France, Hungary, Italy, Latvia, Lithuania, Poland and Romania

Countries which, according to current plans, will be fully liberalized by July 2007 include: France, Hungary, Italy, Latvia, Poland, Romania and Slovenia.

Countries which will not achieve full liberalization until after 2007 include Estonia and Turkey.

[5] See Figure 1 for a country by country summary of findings

Figure 1a: Liberalization Timetables

	Timetable of Eligibility (Electricity)	Timetable of Eligibility (Gas)
Austria	01.10.2001: All customers	01.10.2002: All customers
Denmark	01.04.2000: > 10 GWh/yr 01.01.2001: > 1 GWh/yr 01.01.2003: ≤ 1 GWh/yr (all other customers)	01.07.2000: > 35m Nm3/year 01.07.2002: > 25m Nm3/ year 01.08..2003: >12m Nm3/year 01.01.2004: All other customers
Estonia	Currently: > 40 GWh/yr 01.01.2009: ≥ 10 GWh/yr 01.01.2013: All other industrials	Currently: > 200000 m3 /yr
Finland	01.11.1995: I&C > 500kW (but no electricity exchange existed until 1996) 01.01.1997: Customers with hourly metering 01.09.1998: Households with main fuse max 3x63 A and max demand 45 kW 01.11.1998: All customers with a main fuse max 3x63 A and max demand 45 kW	01.3.2001 (secondary market): ≥ 5 million m3/yr and remote meter reading
France	16.12.1999: > 100 GWh/y 30.05.2000: > 16 GWh/y 08.02.2003: > 7 GWh/y 25.06.2004: All other non-households By 01.07.2007: All other customers	10.8.2000: 237 GWh/y 10.8.2003: 83 GWh/y 01.07.2004: All non-households By 01.07.2007: All other customers
Great Britain	04.1990: Large I&C customers with maximum demand of ≥ 1MW 04.1994: Medium I&C customers with a maximum demand of ≥ 100kW-1MW 09.1998-24.05.1999: Households	By 23.05.1998: All customers
Greece	Currently: All non-households By 01.07.2007: All households (except those living in the non-interconnected islands)	01.07 2005: Electricity producers and CHP plants > 25GWh/year consumption.
Hungary	01.01.2003: > 6,5 GWh/yr 01.06.2004: All non-households	01.01.2004: > 500m3/hour
Ireland	19.02.2000: > 4 GWh/yr 19.02.2002: > 1 GWh/yr 19.02.2004: > .1 GWh/yr 19.02.2005: All other customers	1995: > 265 GWh 2002 > 21 GWh 2003 > 5.25 GWh 2004: All non-households approx. 73,000 kWh
Italy	10.1999: > 30 GWh 04.2000: > 20 GWh 04.2002: > 9 GWh 05.2003: > 0.1 GWh 06.2004: All non-households By 01.07.2007: All customers	06.2000: > 200.000 m3/year 01/01/2003: All other customers

Figure 1b: Liberalization Timetables

	Timetable of Eligibility (Electricity)	Timetable of Eligibility (Gas)
Latvia	Currently: All non-households 01.07.2007: All other customers	N/A
Lithuania	01.07.2004: All non-households	Regulators decide upon individual applications
Luxembourg	N/A	N/A
Netherlands	01.08.1998: 650 largest energy customers 01.07.2001: Green electricity customers 01.01.2002: 60000 middle size I&Cs 01.07.2004: Households & commercials	1998: Liberalisation commenced 01.07.2004: All customers
Norway	01.01.1991: All customers legally eligible to switch through the energy act (but required hourly metering) 01.01.1995: Small / Household customers could switch without hourly metering, but a reduced 246Nkr switching cost remained and switching suppliers could still only take place 4 times per year at the beginning of a quarter 01.01.1997: Switching possible without charges 1998: Network owners must send settlement data by means of the EDIEL standard. The message MSCONS is required for this purpose. 01.01.1998: Switches allowed to switch every week. Switches take place on Mondays 1999: Mandatory use of PRODAT. Messages regarding change of supplier must be sent by means of the EDIEL message PRODAT.	No specific timetable exists for the liberalization of the natural gas market. However, Norway has implemented Gas Directive I into a Gas act and has also implemented Directive II with some exceptions (since Norway is deemed an emerging market in terms of gas)
Poland	01.07.2004: All non-households 01.07.2007: Households	01.07.2004: All non-households 01.07.2007: Households
Portugal	Until the end of 2001: medium voltage (MV), high voltage (HV) and very high voltage (VHV) customers with annual consumption equal or higher than 9 GWh 01.01.2002: All other MV, HV and VHV customers 01.02.2004: Low voltage (LV) customers with contracted power higher than 41,4 kW 01.08.2004: All other customers	N/A
Romania	2000: > 100 GWh/yr 2001: > 40 GWh/yr 2002: > 40 GWh/yr 2003: > 20 GWh/yr 01.11.2004: > 1 GWh/yr 01.07.2005: All other non-households By 01.07.2007: All other customers	08.2001:5,000,000 m3 per year: 10% of market 05.2002: 5,000,000 m3 per year: 25% of market 04.2003:4,000,000 m3 per year: 30% of market 04.2004:3,000,000 m3 per year: 40% of market 01.2005: 3,000,000 m3 per year: 50% of market 07.2005:1,240,000 m3 per year: 50% of market 07.2006: 75% of market 01.2007: All other non-households 07. 2007: All other customers

Figure 1c: Liberalization Timetables

	Timetable of Eligibility (Electricity)	Timetable of Eligibility (Gas)
Slovakia	N/A	N/A
Slovenia	01.07.2007: Households	01.07.2007: Households
Spain	01.01.1998-01.10.1999: Staged liberalisation (by consumption) of I&C customers of 15GWh/yr+ down to to 1GWh+ 01.07.2000: I&C with voltage above 1000V 01.01.2003: Households	01.01.1999: > 20Nm3 per year 01.04.1999: > 10Nm3 per year 01.01.2000: > 5Nm3 per year 25.06.2000: > 3Nm3 per year 01.01.2002: > 1Nm3 per year 01.01.2003 - All consumers
Sweden	01.01.1996: I&C and residential, but new meters required for switchers from incumbents 01.11.1999: I&C and residential, new meters no longer required	01.07.2005: Non-households 01.07.2007 All other customers
Turkey	As of 2005: 7.700.000 kWh/yr By end 2011: All other customers	N/A

2.2. Customer Switching Process[6]

QUESTION:

- Description of the process: How the process is initiated, whom the customer contacts, which are the next steps?
- Description of the process for a new supply, for a change of supplier or for a cancellation. (Please describe here the processes of switching for a customer, who is connected to the distribution network level, i.e. household or a small or medium-sized enterprise).
- Meter reading and billing frequencies
- The access to and use of consumption estimates in the switching process
- Payment methods accepted
- Time for carrying out the switch

2.2.1. Description of the process

2.2.1.1. A Typified (or common) Approach

Typically the process is similar to the following: a commercial supplier proposes new terms to a consumer or a consumer asks a supplier for a proposal. The consumer and the supplier agree on new commercial terms. In some countries, such as Finland, and especially concerning the industrial and commercial (I&C) market, customers can negotiate terms of contract with the new supplier. In other countries, and especially concerning household customers, they cannot.

The process is then formally initiated by the customer when the customer signs a contract with the new supplier and gives a mandate, so that the new supplier (or in some cases the customer) can cancel the old contract and start the switching process. The new supplier (electronically normally) informs the DSO (which typically operates a database to support competition on their networks) that the customer will switch. The DSO then checks the received request and informs the customer (to check) and the former supplier of the requested switch. The former supplier generally may not obstruct a switch but may have the possibility to disagree against the switching because of a valid contract with the customer (in which case compensation for the former supplier may be an alternative) or for some other valid reason such as debt in some countries. Otherwise, the DSO is required to implement a supplier switch and notify the old and new supplier as necessary of the forthcoming switch and the progression of the process.

In the next week(s) the old (and perhaps the new supplier) and the DSO swap certain customer data. The data is transmitted by excel sheets or alike, normally electronically. For this purpose some countries have implemented specific standards for electronic communication in connection with supplier switches, for instance EDIEL (the PRODAT messages) in the Nordic countries.

The customer's consumption until the day of switching is calculated/metered or estimated by the DSO, or metered by the new supplier, or a metering agency, or may be read by the customer -

[6] See Figure 2 for a country by country summary of findings

whatever is accepted by the system and the participants. The DSO is normally in charge of the data handling, and sends it to the former and new supplier for settlement purposes. The switch is then completed and typically communicated to the new and former supplier by the DSO.

2.2.1.2. Process Initiator

Except in a few cases, such as Ireland where suppliers' role was also emphasized, respondents saw the customer as the key initiator in the switching process. It seems that the onus is placed on the customer to be active even though suppliers do, in many instances, also contact the customer in order to attract them.

2.2.1.3. Who the Customer Contacts

In the majority of cases a switching customer only needs to contact the supplier which they are intending to switch to. That supplier will then contact the other relevant parties in the switching process. In some cases, however, such as Hungary, Italy, Turkey and Romania, the customer also has to contact their former supplier. In Portugal (presently but due to be changed so that customers only need to contact their new supplier) customers need to contact their DSO to make an access to the network agreement. In other countries, including Poland and Slovenia, customers have to contact all three parties (new supplier, former supplier and DSO) and perhaps even others such as a balancing ring (e.g. Hungary).

2.2.1.4. Other Findings

The whole process may be more or less centrally or bilaterally supervised and observed, through for example the UK data aggregator.

In some cases brokers and other search assistance services assist in this process. This is especially essential in those markets, such as Poland and Hungary, where a customer otherwise has to contact new and former suppliers and even the DSO as part of the switching process, having to cancel all old contracts and make new ones.

Many suppliers have internet pages where a contract can be made electronically, but contracts are more often made in a conventional way by phone or on the spot.

Suppliers are typically required to provide the customer with written or at least verbal confirmation notification/confirmation and information on the contract and on the prices and other terms applied to the contract. For instance in Great Britain reasonable endeavors must be made by suppliers to contact (whether by phone or letter) "not less than 24 hours nor more than 14 days" all customers following them entering into a domestic supply contract to ascertain whether that customer understood that they had entered into a contract, that they were happy to have done so and that they were happy with the manner of the sale. Contact with the customer may not always be achieved, but non-contact is only acceptable if the above mentioned reasonable endeavors can be evidenced.

Customers are sometimes required to sign and return a confirmation if they have not already done so at the time the agreement was made. In Norway for instance, there has to be a written contract between the customer and the new supplier regardless of the channel (excluding internet)[7] through which the switch was agreed between the new supplier and the customer.

Customers are furthermore sometimes provided with a change of mind period (eg. seven day cooling off period in France and Great Britain for household customers who agreed a contract at a 'distance' or away from the supplier's premises). In Great Britain, many suppliers, under the auspices of the Association of Energy Suppliers (AES), have even signed a code of practice that voluntarily extends the legally binding 7 day period to 14 days.

2.2.2. Meter reading and billing frequencies[8]

Household customers' meters are most commonly read once per year, but there is substantial variation between countries, ranging from 12 times per year in Slovenia and Turkey, to once in two years (sometimes) in Great Britain. One reading per year is the most common, however, with two to 4 readings also being quite common. Countries which commonly or at least often have yearly meter reads for household customers include Austria, Denmark, Finland, Luxembourg, Norway, Poland and Sweden (electricity). Countries which commonly or often have more than one reading per year include Portugal (2), Ireland (4) and Great Britain (0.5-4).

For larger small users the regulations and practice are typically similar to those for households, though meter reading frequency often depends on usage levels and the frequency is consequently generally higher, for instance monthly. For larger customers hourly metering is commonly required.

Additionally customers are sometimes (e.g. Austria and Great Britain) permitted to self-read their own meters if they wish to have more frequent meter readings. Furthermore, customers are sometimes given a degree of choice concerning the frequency of meter reading (e.g. Denmark), and meter readings may be required upon termination of supply (e.g. Sweden and Norway).

Concerning billing, there is also substantial variation between countries, but typically customers receive an accurate bill as often as their meter is read (see above) and additionally a series of estimated bills (up to 11) per year (sometimes decided by the customer as in Sweden). Exceptions include Turkey, Spain and Lithuania where the number of bills each year is equal to the number of meter reads. In France, most small gas customers have their meters read twice a year. They receive 6 bills per year: 2 accurate and 4 estimated.

Since deregulation some changes have been made such as in Sweden where monthly readings are being introduced, and Ireland where the number of readings is decreasing from 6 to 4 and the number of estimated bills (previously not used) will be two per year. Meters are generally also read in connection with change of supplier (unless consumption estimates are accepted – see section 2.2.3.), termination of supply and new meter installation.

[7] In the case of contracts via internet special conditions apply. The supplier must, however, get the unique metering point ID from the customer as well as date of birth or organisation number. This is to make sure the supplier can document that it rightfully is the customer's supplier.

[8] For more information see Figure 2.

2.2.3. Access to and use of consumption estimates in the switching process

If an additional physical meter read is necessary as part of the switching process, the cost must logically be borne by someone. Typically it is the customer. If a customer does have to pay for an additional meter reading in order to switch supplier on a date other than a standard meter reading date, he/she is naturally less likely to switch supplier as a result, depending on the exact cost that is incurred relative to the benefit of switching. The customer can of course simply wait until the standard meter reading date in order to switch, but that may be up to three years away and may thus be considered by the customer to be too distant and thus an undesirable tie-in to the un-predictable future. Such a waiting requirement may also mean that a customer's ability to switch may not coincide with the offers made by competitive suppliers.

Such difficulties may not only reduce the frequency and level of customer switching activity, but may also prevent new competitive entrants from gaining a hold in the market. An alternative to additional meter readings is therefore significant within the switching process. Such an alternative is provided by consumption estimates.

2.2.3.1. Electricity

In the majority of countries, estimations are either the norm, generally accepted or sometimes accepted as a source of time of switch consumption data. In Denmark, Finland, France, Great Britain, Luxembourg, Poland, Ireland, Italy, Norway and Sweden the use of estimations is occasional, conditional or up to parties other than the customer to decide upon.

> **The Case of Finland**
> In Finland, for instance, a customer can have one free meter read each year in the case of switching, otherwise they must switch when their meter is read (once per year) or request to switch based on an estimation or pay for a meter read.
>
> **The Case of Norway**
> Meters should be read when there is a change of supplier. However meter value may be estimated if it is costly for the grid company to get the meter value. The supplier switch cannot (legally) be stopped/interrupted if the customer does not read the meter (in Norway it is more or less based on self readings), so then the meter value is estimated. The switch is already in process when the DSO asks the customer to read the meter.

Estimations are, however, not accepted within the switching process in various countries including Portugal (soon to change to allow estimation), Romania, Slovenia and Turkey.

2.2.3.2. Gas

Switching in the gas market often requires meter readings even in those countries where estimations are or can be acceptable for electricity market switching. In France for instance, so far the rule is to read meters when the customer switches gas supplier. In Italy (gas) a meter reading is requested within the 3rd day before and 1st day after the switch.

2.2.4. Payment methods accepted

A wide variety of payment methods are typically accepted. Direct debit (automatic payment of variable bill amounts directly from a customer's bank account), standing order (as direct debit but for fixed periodical amounts), payment at the customer service centres of energy companies (by cash, cheque or otherwise), payment in banks or by post (e.g. bank or post giro), e-payment, credit card payment and pre-payment (e.g. via pre-payment meter) were all mentioned by respondents.

Generally, though, it appears that typically there are few regulations regarding accepted payment methods in the various countries.

2.2.5. Time for carrying out the switch

Switching times range from approximately one to two months, depending on situation and country. No countries indicated that switching would take longer than two months. Countries indicating switching periods substantially quicker than one month include the Netherlands (maximum 5 days from request by new supplier), Ireland (maximum 10 days) and Spain (variable: either 15 days after request or right after the next meter read). In Norway, the switch time has been reduced and there are plans to reduce the switch time to as little as two weeks.

Linked to the issues of switching period is the matter of when customers are allowed to switch. In some countries such as Austria, Denmark, France, Hungary, Italy, Luxembourg, Sweden and Turkey, the switching can only take place on a given day of any month (typically in the month following the agreement to switch or following a prescribed process period). In some countries, including Finland, Britain, Ireland and Sweden, the switch can take place any time. In other countries, including Romania and Spain (in Spain the customer can choose to switch either 15 days after request or right after next meter read), the switch takes place upon a meter read. In Romania the application for switching leads to a meter reading, indispensable for performing the switch.

Figure 2a: Customer Switching Process

	Who the customer contacts	Process Time (assuming no fixed-term contract)	Yearly Meter Reading Frequency (excluding hourly metered sites)	Yearly Billing Frequencies: (Correct; Estimated)	Consumption estimates accepted within switching process (excluding hourly or more metered sites)	Payment Methods Accepted	When Switching Takes Place
Austria	New supplier	5-8 weeks	1-0.3	Large customers: monthly Small customers: 1	Yes	Various	1st of each month
Denmark	New supplier	Minimum 1 month, maximum 2 months	Hourly (for daily metered sites); otherwise monthly or annually. Other options possible.	Small customers: 1; several	Yes. Switch-moment consumption actual or estimated.	Bank, giro, cash, electronic transfer, cheque and Visa	1st of each month
Estonia	N/A	N/A	At least hourly for eligible customers	N/A	N/A	N/A	N/A
Finland	New supplier, sometimes also former supplier	Typically 2 weeks	1 (load profile sites) 0.5-0.25 (other)	1; 3-11 (but no regulations)	Sometimes, but often a meter read takes place. Customers can be asked to announce meter reading.	Various	Any day
France	Supplier	Approx. 30 days under normal conditions, but variable	1 (households) 2 (SME's) (+self reading)	6 bills for most small customers	Gas: Meter reading required +/- 7 days around the required switching date. Electricity: estimates can be used but supplier can ask for a special metering. Consumption defined by DSO.	Variety	Electricity: 1st of each month Gas: Any day
Great Britain	New supplier	Typically 3-4 weeks	0.5-4 or more	0.5-4 or more; several (not regulated)	Typically, change of supplier meter reading within +/- 5 working days of the Supply Start Date by metering agent. Otherwise estimation is possible, conducted by metering agent (eg. Data collector), but disputable.	Various, including assistance for customers with difficulties in paying	Any day
Hungary	Via trader (tipically): New supplier (former supplier, DSO), balancing ring	Until 01.09.2005: maximum 60 days After 01.09.2005: maximum 30 days	1-4	1-4	N/A	Bank, post etc.	Until 01.09.2005: 1st day of the second month after resignation from former supplier After 01.09.2005: No later than 30 day after resignation from former supplier

Figure 2b: Customer Switching Process

	Who the customer contacts	Process Time (assuming no fixed-term contract)	Yearly Meter Reading Frequency (excluding hourly metered sites)	Yearly Billing Frequencies: (Correct; Estimated)	Consumption estimates accepted within switching process (excluding hourly or more metered sites)	Payment Methods Accepted	When Switching Takes Place
Ireland	New supplier	Maximum 10 days	Quarter hourly metering (customers over 300MWh/yr consumption) 4	4;2	Yes, if customer authorises Meter Registration System Operator (MRSO) to issue the appropriate data to relevant parties. Otherwise a meter reading takes place.	At least 3 means of payment	Any day
Italy	New supplier; former supplier	1-2 months. Minimum 30 days	Agreed in the contract; Rapid application of interval metering also to household customers	Agreed in the contract	Gas: No. Meter reading required Electricity: Yes. Meter reading estimation (load profile) in absence of meter reading	Post, bank, credit card, standing order	1st working day of the month
Latvia	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lithuania	N/A	N/A	N/A	Monthly	N/A	N/A	N/A
Luxembourg	New supplier	At least 1 month's notice (DSO practice)	1 (households) ≥12 (larger customers)	Variable	DSO reads meter if requested by old or new supplier. Otherwise customer reads meter	N/A	1st day of month.
Netherlands	New supplier	Maximum 5 days from request by new supplier	No regulations	No Regulations	No regulations	No regulations	N/A
Norway	New supplier	≤ 3 weeks of notification of DSO	1 + upon termination of supply	N/A	Yes. Meters should be read (normally self-reading by customer requested by DSO) for change of supplier. However meter value may be estimated if it is costly for the grid company to get the meter value	No regulations	Customer can switch every monday (soon to be any day)
Poland	Via trader (typically): Former supplier, new supplier, DSO	Depends on contract (no regulations): typically at least 30 days.	1 or more (households) 6 or more (larger users)	1 or more; 11 (households) 6 or more; 6 (larger users)	Depends on contract between suppliers and DSOs	Various	N/A
Portugal	Currently: Supplier, DSO (access to the network agreement)	N/A	12 (larger low voltage customers) 2 (houseolds and small users)	2-12; 10-0	Currently No. Switching is based on actual meter read. In the near future households will be able to switch based on estimates.	No regulations for customers in the market	LV Customers: Day of the monthly meter reading following contract. All Others: 1st day of following month of contract

Figure 2c: Customer Switching Process

	Who the customer contacts	Process Time (assuming no fixed-term contract)	Yearly Meter Reading Frequency (excluding hourly metered sites)	Yearly Billing Frequencies: (Correct; Estimated)	Consumption estimates accepted within switching process (excluding hourly or more metered sites)	Payment Methods Accepted	When Switching Takes Place
Romania	New supplier, former supplier	Minimum 30 day after informing former supplier	Hourly metering recorded daily	Monthly	No. Switching based on actual meter read.	Various. Negotiated between customer and supplier	Upon meter read. Gas: Upon signing agreement with new supplier.
Slovakia	N/A	No regulations	Various: Typically monthly	1; 11	N/A	Depends on individual contracts	N/A
Slovenia	New supplier, former supplier, DSO	Max 1 month	12 (industrial customers) 1 (households)	11 (estimated) 1 (correct)	Customer provides switching estimates to supplier but switch based on meter read.	Various. Negotiated between customer and supplier	N/A
Spain	New supplier	Variable: 15 days after request or right after next meter read	6	6	Yes. Estimates are used if customer switches between meter reads. Otherwise, meter read is used.	Various. Direct Debits / Standing orders are most common. Also payment at banks or by post.	Customer chooses: 15 days after request or right after next meter read.
Sweden	New supplier	Regulation: Minimum 1 month. In practice: 1-2 months.	Currently: 1 as of 2009: 12 + upon termination of supply	3-11 (often customer's choice)	Sometimes. DSO can use estimation if an actual meter read has taken place within 3 months.	Various. E.g. Postal, giro or internet.	1st day of the month .
Turkey	New supplier, former supplier	2-6 weeks	12+	12	NO. Meter is read at 10:00 at the end of the month before the switch.	Various. Negotiated between customer and supplier. E.g. At customer service centre, in banks, direct debit/standing order.	If new supplier applies before 20th of a month, customer can switch at beginning of next month. Otherwise customer has to wait one month.

2.3. Metering Requirements

QUESTION:

- The requirements for metering for customers connected to the distribution network
- The use of load profiles (what kinds of load profiles are used)
- The introduction of new metering techniques and their impact on the switching process

The following answers relate primarily to the electricity market, due to the general absence of Gas market responses to the questionnaire

2.3.1. The requirements for metering for customers connected to the distribution network

Metering is normally the responsibility of the local distribution system operator (DSO). Key tasks typically include meter reading, data aggregation, data transfer to market players (suppliers, market operators etc.), installation and maintenance of meters as well as meter reading / consumption estimation and profiling. Ownership of meters is consequently also normally held by the DSO, although customers sometimes also have the right of ownership (but few take advantage of this right).

Medium size customers (defined variably but typically with a load over approximately 40-50 kW, or a fuse over approx 3x 50 or 60 A, or around at least 100.000 kWh consumption), regardless of the country concerned, tend to have hourly or more frequent (such as every 15 minutes) interval metering, typically aggregated on a daily or monthly basis. In some countries, larger-than-household small user customers, especially eligible customers, may also be required to have such metering. In some other countries, however, such as Ireland, the consumption threshold for interval metering is substantially higher.

Small customers, especially household customers, are generally equipped with standard (e.g. electro mechanic) meters. Exceptions include Norway, where a small number -few percent- of households also have hourly-based meters (which are often only read weekly); and Sweden, where all household customers' meters will be read on a monthly basis by 2009. In fact, in Sweden where hourly metering is already enforced by law for large customers (> 200 A), the threshold for interval metering will be reduced to > 63 A already by July 2006. In Italy, electro-mechanic meters are being substituted with remote-control electronic meters (see section 2.3.3 for more information) by the major distribution company to all household customers.

Concerning the reading of standard meters, regulations vary greatly, ranging from monthly to once in three years. In practice, however, the reading of standard meters is most commonly conducted once or twice per year.

Standard-meter reading is furthermore often supplemented by customer-self reads and DSO estimations based on standard load profiles, for instance in Austria, Finland, France and Great Britain.

Figure 3. Hourly Metering Requirements

Country	Hourly metering requirement
Austria	Annual consumption exceeding 100.000 kWh or more than 50 kW of connected load requires metering every quarter of an hour.
Finland	The consumption places that are equipped with main fuses of over 3 x 63 amperes must have metering based on hourly metering. However, if an electricity user does not want, the hourly metering is not required for those consumption places to which electricity is bought with terms and conditions applying to retailer's obligation to supply, if a service (connection) contract applied to a consumption place has been agreed before the 1st of January 2005 or if consumption in a consumption place is no more than 5 000 kWh per year.
France	Electricity: Consumption is measured by index or 10 minute intervals for delivery points with a power higher than 250 kW. The regulator has asked the DSO to extend this requirement to 100 kVA. Gas: Daily metering applies to customers consuming more than 5 GWh per year.
Hungary	Required if the main fuse is larger than 3x50 amperes
Italy	Real-time meters must be present on all free market customers' points of supply, excluding LV customers; all default customers' point of supply, excluding LV customers. With regard to MV default customers, the regulator fixed a timetable for the mandatory installation of real-time meters by 31 December 2006.
Norway	Metering points with annual consumption exceeding 100.000 kWh: All customers may require hourly metering, but must then pay the excess costs. The grid company may meter hourly in any case.
Portugal	Required (by telemetry) for customers with voltage greater than 1 kV.
Spain	Required for 1kV consumers and above. Any other consumer can also have hourly metering as long as he pays the extra costs involved.
Sweden	Electricity: Currently required (hourly metering with daily reading) for customers with a main fuse larger than 3x200 amperes. From July 2006, the limit for hourly metering will be reduced from 200 A and above to 63 A. Gas: Preliminary reports are sent every day and final reports including the daily values are sent each month.

2.3.2. The use of load profiles (what kinds of load profiles are used)

Pre-determined standardized synthetic load profiles, generally considered essential for the liberalization process in the smaller user market, are used or soon-to-be used in all markets where household customers are eligible. Additionally they are used in Italy and France even though household customers are not eligible in these countries yet. They are used for the estimation of non-interval metered smaller customer consumption (typically enabling half-hourly - as in Great Britain - or per 15 minute - as in Portugal - consumption estimates) and for balance settlement for eligible customers.

There are essentially two types of load profile, namely category and area profiles. Load profiles consequently vary by for example customer type (e.g. different types of industry or farms; homes with or without electric heating) or by region / area (e.g. Denmark and Sweden). The number of standard load profiles used also differs substantially. For instance in Austria there are 18, in Great Britain / Ireland there are 8 (one and two respectively for household customers), in France 15 (10 for gas), in Finland 3 and in the Netherlands 9.

If the consumption patterns of a given customer group differ significantly from the relevant standard load profiles, the DSO normally may instead use a more specific profile, following notice to and acceptance from affected parties such as suppliers, regulator etc.

Load profiles vary in their detail and method of calculation. They may include for instance estimations of consumptions by day type (e.g. Monday-Friday, Saturday, Sunday), by month, by temperature zone (for instance, in Finland, hourly energy values are adjusted 4 % per centigrade difference from the monthly nominal temperatures of the load profiles).

Load profiles are typically determined by DSO's or regulators but are commonly overseen by regulators in co-operation with the market participants including even the TSO. In Great Britain the Profile Administrator also plays a key role in the development of load profile and their definitions.

Figure 4. Type of Load Profile

Country	Type of load profile
Austria	18 load profiles for users (household, small and medium sized enterprises, agricultural undertakings and interruptible supply - hot water tanks, electrical room heating-) with a connected load of max. 50 kW or consumption of max 100.000 kWh.
Finland	3 categories of profiles for users with main fuse max. 3x63 A or a consumption of max. 100.000 kWh. Category 1: dwellings with an annual consumption of 10.000 kWh or less; Category 2: dwellings with a yearly consumption of more than 10.000 kWh. Category 3: others than those in categories 1 and 2.
France	Electricity: 15 profiles and more than 50 sub-profiles applicable to all users: 11 for households (≤ 36 kVA – non eligible) 11 for SMEs (≤ 36 kVA) 8 for medium-sized customers (36-250 kVA) 23 for large customers (≥ 250 kVA) 1 specific profile for street lightning 2 profiles for generators (hydraulic or cogeneration connected to the distribution network) Profiles are determined and attributed by the Electricity network users group (*CURDE*) on the basis of historical data. (Details available on ERD's website: www.edfdistribution.fr) Gas: 10 profiles and 3 climatic geographic zones: 3 profiles for households 1 profile for residential buildings 3 profiles for service and other general businesses 3 profiles for industrial activities Gas profiles are attributed by the DSO's on the basis of historical data (or activity sector for a new site).
Hungary	4 profiles for users with main fuse smaller than 3x50 A and one for public lighting (street-lighting etc) customers.
Italy	Area Load Profile used for points of supply with no real-time meter installed, with the exclusion of energy supplied to public lighting service which is subject to a conventional load profile defined by the Regulator.
Norway	Area profile (called adjusted system load profile) in each grid area for all metering points that are not hourly metered. Households and smaller industries have the same profile. The area profile is re-calculated each week.

	The network owner's system load profile represents the hourly net input into the network owner's power network. The adjusted system load profile is derived by taking the system load profile as a point of departure, deducting the network loss, and then deducting the actual end users and producers with hourly settlement. The adjusted system load profile thus represents the average consumption profile for those end users that are not metered hourly. The profile is not a so-called predefined profile determined prior to consumption of the power. This is a profile that is derived on the basis of the actual hourly power input. There is one area profile in each grid area. There are about 130 distribution companies in Norway. Grid companies with adjacent grids may use a common profile and co-operate in the reporting of settlement data to the entity with settlement responsibility (in Norway the TSO).
Portugal	Load profiles are applicable to customers with voltage equal to or lower than 1 kV. Load profiles are approved by ERSE. One unique load profile has been approved for LV customers with contracted power higher than 41.4 kW. No Load profiles for LV customers with contracted power up to 41.4 kW have yet been approved.
Spain	Seven load profiles. All of them for consumers connected to the low voltage grid.
Sweden	The area profile model is used for the calculation of consumption estimation for load-curve customers, i.e. presently customers with power subscription below 200 A.

2.3.3. The introduction of new metering techniques and their impact on the switching process

Interval meter reading is increasingly enhanced (e.g. in Italy, Portugal, Spain and Sweden) by remote meter reading (AMR) technologies.

Concerning Italy, in 2001 the largest electricity distribution company in Italy (Enel) commenced the substitution of existing electromechanical meters with a new AMR system. The project implies the substitution of low voltage meters (for around 30 million customers) by the end of 2006. The regulator is now promoting the implementation of remote control meter techniques and the substitution of traditional meters for other distribution companies.

In Portugal, regulations require that MV, HV and VHV (but not LV customers) customers have remote meter reading and there is in place a program to replace old equipments that does not comply with this requirement.

In Spain remote meter reading is mandatory for electricity for consumers with a contracted power approximately above 450 kW.

AMR can, in particular, enable billing based on actual consumption, lower costs connected to the network and provide additional supply quality (e.g. activation, disconnection, modification of the power supplied), as well as providing real-time consumption data to interested parties. A further disputed argument is that it can also save meter reading costs.

AMR also improves the ground for switching. It speeds up the services provided by the network operator in connection to supplier switching as the metering data is immediately available. It also potentially reduces some of the windfall competitive advantage of incumbent suppliers derived through reduced risk and cost associated with metering and consumption forecasting.

AMR, however, is sometime seen as a potential unreasonable financial burden for small customers who, ultimately, would probably have to pay for the installation and adoption.

2.4. Electronic Data Interchange (EDI)

QUESTION:

- What kind of systems are there in place for data interchange between suppliers and distributors (as electronic data interchange systems must be in place to allow large number of customers to switch their supplier)
- Basic information in the database (ref. number of the supply point, power contracted, etc)
- Information to be made available and subjected to be exchanged to consumers and suppliers

A vital component of the switching model is the way information is exchanged between the customer, retail suppliers and the network operator during change of supplier. Without the utilization of electronic data interchange (EDI), it is not possible to manage large numbers of retail customers switching between suppliers. A standard method of transmitting data is required to enable electronic handling and storage of data without manual intervention, which increases the speed, security and reliability of the data transmissions and ensures that the stored information is correct. EDI is also important for the speed of switching processes and its efficient use shortens the time to carry out a switch. EDI is being used in a number of countries and its use will spread to non-user countries since this seems to be the cornerstone of switching from the technical point of view. To integrate national retail markets, it would seem to be a natural requirement that the EDI systems used in different countries should be compatible with each other.

2.4.1. Systems for data interchange between suppliers and distributors

Despite the apparent complexity of the process of customer switching as well as the related metering information requirements, the technology used within the process (especially concerning the switch itself) is sometimes remarkably simple.

Regarding the switching process in particular, if there is any system at all, then data required by suppliers and DSO's to complete the customer switching process is often tabulated on excel sheets or similar (e.g. Austria and Poland) and communicated to each other via email. This is not to criticize the systems used but it describes a broadly cost-effective and pragmatic if not optimal solution to the problem, one which can work so long as switching volumes are relatively small.

Metering data is also often communicated via email, but using formats such as PRODAT (e.g. in Finland).

The exchange of information in connection with supplier switching is apparently rarely defined by law, although procedural recommendations do typically exist (especially concerning load-profile customers) via national regulators as well as regional and European level organizations, associations and authorities. For instance, in Finland, the branch organization has given the procedure recommendations regarding PRODAT-messages. Since the procedure is not regulated, it is not binding, but in most cases exchange of information is carried out by PRODAT messages between DSOs and suppliers. In Norway, however, the use of PRODAT (and MSCONS) is mandatory, and is firmly established in the regulations/provisions to the Energy Act. Furthermore the contents of the messages are regulated in a detailed manner.

The Case of Great Britain

Both the energy markets use IT networks to store and communicate data between users to support competition. In the electricity market distributors are required to provide a Metering Point Administration System (MPAS) which acts as a central store for meter information (eg. technical and appointment details). They are also responsible for providing a service and network through which all suppliers and their agents can communicate data with each other and MPAS – the service is called the Data Transfer Service (DTS) and the network the Data Transfer Network (DTN). Electricity Distributors are obliged to provide these services and systems in accordance with conditions 37 and 38 of their Standard License Conditions for the Distribution of Electricity and with the MRA paragraphs 12 and 13.

A similar requirement is placed on Gas Transporters to provide a service and network to store and communicate information - condition 31 of the Standard License Conditions for Gas Transporters requires that a Supply Point Information Service (SPIS) is provided and maintained. Section U of the Network Code describes in more detail the service and network required, which is collectively called the UK Link. The network is also called the Information 'Xchange Network (IXN).

Both an MPAS and SPIS are required to maintain a register of technical and/or other data as is necessary to facilitate the supply of electricity or gas. The data stored on these systems should include the identity of the supplier responsible for a meter, the type of metering equipment installed and a unique and accurate address of each such premises (see Electricity Distribution Standard Condition 37 2(a) and Gas Transporter Standard Condition 31 3(a)).

These registers are maintained by their relevant users by communicating flows over the relevant network (i.e. the DTN or IXN). Such flows are prescribed in the Data Transfer Catalogue (see condition 37 of the Electricity Distribution Standard License Conditions) and the UK Link Manual (see Section U of the Network Code).

In accordance with Electricity Distribution Standard Condition 37 2(c) and (d), an MPAS must provide, in a timely and efficient manner, such data as is reasonably required by any supplier or agent thereof, any appropriate person identified within the BSC or Settlement Agreement for Scotland and/or any entitled person as identified within the MRA and that it should maintain an enquiry service for any supplier or customer as is relevant to any premises which is owned by the customer.

Gas Transporter Standard License Condition 31 3(c), (d), and (e) require that data held in the SPIS is provided in a timely and efficient manner as requested by a customer, shipper (or associated agent) or any other person identified in the Network Code and that an enquiry service is maintained for use by any customer of a gas supplier.

The Case of Ireland

ESB Networks developed a software component to provide the market participants with a package for wrapping and sending market messages over the internet to MRSO/DSO and for receiving and unwrapping messages from MRSO/DSO. This software package is referred to as the Market Participant Communication Component (MPCC).

This component provides mechanisms to carry out the following processes:

- Wrapping & sending messages to the Market Gateway.

- Receiving & unwrapping messages from Market Gateway.
- Manually create low volume market messages.
- Viewing messages

The use of the MPCC is optional i.e. the Market Participants can develop their own component as long as it adheres to the relevant standards i.e. Market XML Schema and RosettaNet.

The solution was developed using a product called Seebeyond. The MPCC consists of a number of Seebeyond components - eXpressway server and the OnRamp package. This enables the Market Participants to fully participate in B2B exchanges.

The Seebeyond components make use of an Apache Webserver for some B2B exchanges via HTTPS. This solution also contains a number of webforms, which are hosted from the Apache Webserver.

Basic information in the database:

- Senders ID
- Recipient ID
- Transaction Reference number
- MPRN Level Meter Point Reference Number
- Meter Point Address
- Unit No.
- Address
- Company No.
- Contact Details

The Case of Spain

An information exchange system was implemented using XML procedures late in the last quarter of 2002 between the main agents involved in the switching process. Distribution companies are the agents responsible for maintaining the information regarding the consumers connected to their network.

- Basic information in the database:
- Unique code per point of supply
- Distribution company
- Location of the point of supply
- City
- Province
- Tariff applied (regulated end user or access tariff)
- Voltage
- Extension rights recognised
- Access rights recognised
- Maximum power allowed
- Load profile
- Meter
- Ownership of the meter
- Date of the last reading
- Availability of a Power Switch controller
- Consumption of the last year

- Date of the last contract
- Date of when the extension rights expire

Consumers can access all the above information. Suppliers can access 2, 3, 4, 5, 7, 8 and 9.

The Case of Portugal

The data received under the remote meter readings is exchanged with the use of standardized electronic messages between the distribution operator and the suppliers of customers in the market. Those messages and the systems in support of data are foreseen in a guidance document approved by ERSE.

In the Codes approved by ERSE (commercial relations and access to network) is defined the type of data that each participant in the switching process must give and is entitled to receive. All the data concerning switching will be, in near future, standardized.

Basic information in the database:

The basic information related to switching comprises a number of statute of eligible customer, a alpha-numeric supply location code, consumption, contracted power, date of switch and data for identification of the customer (i.e. name, address and tax identification number). Other specific information is defined in the terms of the use of the networks agreement and comprises technical information about consumption site (maximum power, meter equipment characterization, etc.).

All the information mentioned above is made available for customers and their suppliers.

The Case of Sweden

PRODAT is used for EDIFACT messages (Sweden is using EDIEL). The following information can be found in the database:

- EDIEL-id of supplier
- EDIEL-id of net area
- Region-id for load profile calculation
- Party id
- Party name
- Party address
- Meter reading period
- Starting date of supply
- Balance responsible-id
- Reference to authorization
- Date for reading, connection, disconnection and reconnection of meter
- Meter reading and date
- Measuring method (and profile No)
- Estimated period (annual) volume
- Period for “Estimated period volume”

Information to be made available for consumers and suppliers:

- Meter reading when new supply is starting as well as energy consumption since last reading,
- Reason for meter reading

Information should be sent to the customer within 15 days.

2.4.2. Basic information in the database

The data required, collected and held within supplier's and DSO's databases for the purpose of enabling the switching process may in fact include: customer name and postal address, unique meter identification point number (e.g. Austria) and or supply point number – which can contain many meters (e.g. Denmark); meter type; fuse sizes; meter owner; meter address; max capacity consumed or delivered; energy within a specified time period (for instance per 15 minutes or yearly depending on the consumer group concerned); billing period, payment methods, bill-sending method.

2.4.3. Information to be made available and subjected to be exchanged to consumers and suppliers

Suppliers typically require: Individual consumption data[9] for all supplied customers (as precise data as is available); aggregated consumption data for all supplied customers (as precise data as is available); meter or supply point identification point numbers; customer load profiles, voltage levels for use of system charges, month/time/regularity of meter reading, consumption data from previous year (for estimation)

The availability of such information can be assisted by the existence of connection registers, as in the Netherlands for instance.

[9] (+/- once per year for consumers without load-profile meter or more often for consumers with load profile meters)

2.5. Obstacles to Customer Switching[10]

- QUESTION:
- Are there any charges for switching the supplier?
- Are there any rules or regulations that hinder or slow down the process of switching?
- Are there any reported "bad" practices used by the companies to hinder or slow down the process?
- Are there any reasons to refuse customer switching?
- The treatment and role of outstanding debts when assessing a request to switch a supplier?

2.5.1. Charges for switching supplier

In most countries the DSO is not allowed to collect a separate fee on registration and balance determination services and other corresponding services related to changing the electricity or gas supplier. Consequently, there are typically no leaving/changing or meter reading fees resulting from changing supplier, either because the DSO's is not allowed to collect a separate fee on the reading of a meter, because switching takes place at the time when the meter is read, or because metering estimations are accepted within the switching process. This means that costs associated with switching are in practice spread between all customers in the market (as mentioned for instance by France[11] and Norway).

However, there are exceptions. The most common (e.g. in the Netherlands – also in other countries but rarely considered a cost of switching) is that customers must pay compensation to their former supplier if by switching they break an existing fixed-term contract. Another exception concerns additional meter reading. For instance, in the Finnish electricity market, the DSO is not allowed to charge for reading the meter if at least one year has elapsed from the customer's previous change of supplier, but may charge a meter reading fee otherwise (although an estimate is often accepted instead of a meter read).

Most countries also forbid or aim to forbid, explicitly or otherwise, the use of unfounded terms or restrictions obviously limiting competition within the electricity and gas market. DSO's, former suppliers and other parties are thus normally not allowed to collect other fees that obviously aim at to restrict changing the supplier.

2.5.2. Rules or regulations that hinder or slow down the process of switching

Typically, electricity and gas market legislation requires that prices and terms of the network services and the criteria according to which they are determined shall be equitable and non-discriminatory to all network users. Discriminatory DSO behaviour is nevertheless often considered apparent.

[10] See Figure 5 for a country by country summary of findings

[11] Since July 2005 (law of July, 13th 2005 amending article 49 of law of February, 10th 2000), (except, for the customers switching for the first time for supplier) the customer must pay charges for switching the supplier, notably to the DSO.

Procedural regulations and practices can, however, slow down the switching process. One such factor (noticed for e.g. in the Italian energy market) is the termination note deadline defined in the supply contract and the duration of procedures necessary to obtain access to the networks. The requirement for customers to clear their debts before switching (see section 2.5.5. below on debt) can also be seen as slowing the process of switching, as can the absence of an electronic data exchange system (e.g. in Romania for electricity customers) which could handle large volumes of switching. Another such factor (e.g. in Turkey) is the need to read meters before switching can take place.

It should not be forgotten, though, that a major obstacle to customer switching can lie beyond customer switching procedures in factors such as 'low' regulated tariffs (e.g. in France or Romania) and the lack of liquidity in the supply side of the market (e.g. in Hungary).

> **The Case of Hungary**
> In Hungary, for instance, the bulk of power generation capacity is controlled by the public electricity wholesaler via long-term power purchase agreements (PPAs). The purpose of PPAs is to ensure enough capacity for public electricity (captive) customers (the public wholesaler is obliged to serve public suppliers who are obliged to serve public electricity customers). The PPAs (and the regulated market) are absorbing most of the generation capacity, leaving a limited amount available in the free market."

2.5.3. Reported "bad" practices used by companies to hinder or slow down the process

Common messaging formats, such as Prodat messages, switching process platforms, as mentioned in section 2.4 and internet procurement platforms are not applied throughout Europe or even necessarily within those countries that have them. Customer switching procedures can therefore take significantly (up to several weeks) longer than necessary and there can (as noticed for instance in Romania) be inabilities to handle large volumes of switching. Other communication problems can also exist, as exemplified by Sweden:

> **The Case of Sweden**
> There are sometimes communication problems between the electricity suppliers and the distributions companies. These communication problems are often caused when some information about the customer is missing or when the electricity company and the distribution company do not have the same information about the customer.

Old tariff structures linking distribution and energy prices in one package can also inhibit the change of supplier, since the result of the change (involving splitting package price) can mean a higher total price (electrical energy price + distribution price), even though the competing offer price for energy would be lower than the present one.

Distribution service operators may also request unnecessary information or documents (e.g. in Italy), and (as also noticed in Italy) incumbent suppliers (and other parties) may distribute misleading information messages to individual customers, through their own communication channels or through the media. Suppliers may also delay in sending out final bills to switching customers.

Some non-uniform practices regarding the share of the costs of balance settlement between the suppliers and the network operators also exist, as exemplified by the case of Finland:

The Case of Finland

Some of the network operators or external companies which take care of the information exchange services on behalf of the network operator charge the supplier for the Ediel-messages they provide. These costs can be so high that it is not profitable for suppliers to take only one or a few new customers outside their own obligation to supply area. This is one reason that reduces the suppliers' willingness to make offers to the customers. Another problem is that not all the network operators or suppliers use the same consumption place identification numbers. That slows down the smoothness of procedures taken by the network operators and suppliers since the identification numbers have to be checked more than once.

Non-neutrality may also occur in other ways as seen, for instance, in Norway and Poland:

The Case of Norway

There are some examples of breaching of the regulations on neutrality of the network company (favouring the incumbent supplier) in order to win back customers switching to a new, independent supplier. There are also some examples of network companies being reluctant to give suppliers the metering point ID of their customers when the suppliers have the authority from the customer to get the metering point ID from the DSO.

The Case of Poland

In Poland, the following three factors are of particular concern at present:

- High technical requirements of distributors concerning meters and data transmission systems
- Renegotiation of contracts' conditions with tariff customers willing to change supplier in order to capture them by their local distributor
- Prolonged and non-transparent (to customers) 'formal procedures for switching supplier' applied by distributors.

2.5.4. Reasons to refuse customer switching

One of the main reasons why customers' requests to switch are refused is that the customer has an outstanding fixed-term contract. This is a reasonable reason for refusal, but it is apparent (e.g. in Finland and France) that some customers are not aware of the status of their present contract and consequently switch supplier, only to find out soon afterwards that they have to pay compensation for the cancellation of the fixed-term contract with their former supplier.

Other reasons include customers' outstanding debt (see section 2.5.5.), fraudulent intervention on meters (e.g. in France), non-adherence to timescales set within switching procedures (e.g. in Great Britain), multiple concurrent applications to switch (e.g. in France), notifications (message contents) that are not in line with the regulations (e.g. in Norway, where a network company can subsequently refuse a supplier switch), non-compliance with switching rules and access to the network regulations (e.g. in Portugal), and the fact that the former supplier may simply have the right to object to a customer transfer (e.g. in Great Britain).

The Case of Great Britain

Both energy markets allow the former supplier an opportunity to object to a customer transfer. In the electricity market the circumstances and processes used are found in the MRA, Paragraph 16. A former supplier may object given the following reasons:

With regard to Domestic Sites if:

- the former supplier had notified in writing the customer of outstanding debt more than 28 days prior to the notification of change of supplier (CoS); or
- the former supplier believes that the contract it holds with the customer has not nor is due to expire on or before the proposed supply start date SSD; or
- the new supplier contacts the former supplier and both agree that the application for CoS was made in error; or
- the customer contacts the former supplier to advise them that they have not entered into a contract with the new supplier; or
- the application for CoS has not applied to register all related metering points on the same SSD.

With regard to Non-Domestic Sites if:

- the provisions of a contract (excluding a deemed contract) allow it; or
- the new supplier contacts the former supplier and both agree that the application for CoS was made in error; or
- the application for CoS has not applied to register all related metering points on the same SSD.

The Standard License Conditions for the Supply of Gas allow a former supplier to object to a customer transfer in the following circumstances:

With regard to Domestic Customers if:

- the customer wishing to transfer has been notified in writing of debt outstanding for more than 28 days; or
- the new supplier agrees with the licensee that he has applied for the transfer in error.
- With regard to Non-Domestic Customers if:
- the provisions of a contract allow it; or
- the new supplier agrees with the licensee that he has applied for the transfer in error; or
- for contracts agreed by the former supplier with the customer prior to the 1 January 2004, the customer wishing to transfer has been notified in writing of debt outstanding for more than 28 days.

2.5.5. Treatment and role of outstanding debts when assessing a request to switch a supplier

As a rule, the treatment of 'debt' is treated equally regardless of whether the customer is switching (or aiming to) or not. However, a bad debt customer can in some cases be required to provide security (for instance a down payment) or may (as in Great Britain) be refused the opportunity to leave the current supplier until his/her debt status changes. Some countries, such as Luxembourg, do not yet have any regulatory consideration of this issue. Defined approaches include the following:

The Case of France
Debts contracted by customers cannot hinder switching and have to be resolved by standard rules of commerce.

The Case of Great Britain
For domestic customers, where a bill remains unpaid for 28 days or more, the supplier may prevent the transfer form taking place. For commercial customers, it is a contractual matter.

The Case of Ireland
A supplier may not prevent a customer from moving to alternative supplier for reasons of debt.

The Case of Italy
The existence of outstanding debts does not affect the switching process. After the switching process has been completed, the former supplier may activate ordinary legal procedures for the forced collection of unpaid credits.

The Case of Lithuania
A supplier has a right do not sign a contract with insolvent or unfair consumer.

The Case of Norway
Outstanding debts cannot hinder a switch. However, a supplier may run a credit check on a customer before entering a contract and send a notification (EDIEL, PRODAT message) to the DSO. It may thus reject customers if they are not credit-worthy.

The Case of Poland
The order and principles of the debt paying to supplier and to distributor are not defined. Consequently, suppliers are not interested in taking the risk related to signing contracts with customers that have problems with financial liquidity.

The Case of Portugal
In the regulatory framework approved to implement the market opening for LV customers with contracted power up to 41,4 kW it's stated that the existence of debts to the regulated supplier prevent customer from switching supplier. The existence of debts in the open market is not a reason for preventing a customer from switching supplier.

The Case of Romania (electricity)
If an eligible customer has decided to switch he must pay all his debts (or the new supplier accepts to undertake its debts) before the new contract entering into force.

The Case of Slovakia
Outstanding debts shall be settled before switching by law

The Case of Slovenia
Before switching, customer must fulfill all outstanding debts to his/her current supplier. If customer has fulfilled all contractual obligations (outstanding debts) the supplier is obligated to give approval on this.

The Case of Sweden

The electricity suppliers often do a credit report to check the customers' economic situation. If the suppliers find out that the customer can't pay the bills, the suppliers have the right to refuse to enter into an agreement with the customer.

The Case of Turkey

A customer with outstanding debt cannot switch his supplier.

Figure 5a: Obstacles to Customer Switching

	Charges for Switching Supplier	Rules or regulations that hinder or slow down the process of switching	Reported "bad" practices used by companies to hinder or slow the process	Reasons to refuse customer switching
Austria	None	The DSO is not obliged to inform the new supplier about the data of the customer (i.e. metering point ID)	Lack of unbundling of DSO and supplier can lead to a preference for former supplier	Valid Contract
Denmark	None	None	Electricity: Problems to get consumption data from one of the incumbent companies (DERA follows the problems very closely). Gas: No	No
Estonia	N/A	N/A	N/A	N/A
Finland	DSO may charge meter reading fee if less than one year has elapsed since customer's previous change of supplier	Lack of comprehensive control of non-discriminatory behaviour by DSOs. Clearer rules needed DSO may charge meter reading fee if less than one year has elapsed since customer's previous change of supplier	Not all network operators and retail sellers use Prodat messages. Messages are sometimes delayed for weeks. Old tariff structures linking distribution and energy prices in one package	Valid Contract (however, some customers are not aware of the status of their present contract and consequently switch supplier and then discover that they have to pay compensation for the cancellation of the fixed-term contract with their former supplier) Debt not backed by security
France	Yes, for the 2nd supplier switch (forthcoming law)	Gas: A switch application must be signed by customer and may be asked by DSO	None	Valid Contract Refusal by DSO due to previous demand on switching or if there is a fraudulent intervention on meters.
Great Britain	None	Suppliers may prevent a customer transferring where there is an outstanding debt on the customers account.	None	Debt; Contractual requirements (commercial customers); Non-adherance to Timescales; Both energy markets allow the former supplier an opportunity to object to a customer transfer
Hungary	None	Lack of liquidity on the supply side of the market	N/A	N/A
Ireland	None	None	None Yet	On the basis of erroneous transfer
Italy	None	Termination note deadline defined in the supply contract Duration of procedures necessary to obtain access to the networks	Gas: some episodes of DSOs opposition to network access and of diffusion of misleading information to customers, usually from incumbent supplier	None
Latvia	N/A	N/A	N/A	N/A
Lithuania	None	None	None	Debt Gas: Quotas for suppliers from Russia

Figure 5b: Obstacles to Customer Switching

	Charges for Switching Supplier	Rules or regulations that hinder or slow down the process of switching	Reported "bad" practices used by companies to hinder or slow the process	Reasons to refuse customer switching
Netherlands	Compensation for breaking fixed-term contract	N/A	Overall there are a large number of switch requests that are not accepted first time	Valid Contract
Norway	None	None	Non-neutrality of the DSO to win back customers switching to a new, independent supplier DSOs reluctant to give suppliers the metering point ID of their customers	If notifications (EDIEL/PRODAT messages) are not in line with the requirements of the regulations, the DSO shall in fact refuse a switch. The supplier shall be notified about this, and must correct what is wrong. Supplier can thus refuse a customer who is not credit-worthy
Poland	None	Unfavourable balancing rules for switching customers imposed by distributors	Technical requirements of distributors Renegotiation of contracts' conditions with tariff customers willing to change supplier Prolonged and non-transparent switching procedures	Debt
Portugal	None	None	None	Debt with the regulated supplier and other non-compliance with switching rules
Romania (electricity)	Charge for meter reading for contract's cancellation Fee for new supply contract conclusion	Customer can not change supplier unless he pays all the debts to the previous supplier (NB: for gas customers there is no need to pay all debts before switching supplier) Regulated tariffs, if set too low Absence of electronic data exchange system	Bureaucracy in the absence of an electronic exchange data and in the absence of internet contracting arrangements Suppliers delays sending out final bills	Debt
Slovakia	None	None	None	Debt
Slovenia	None	Maximum deadline for switching balancing groups is 30 days	None	Debt
Spain	None	None	N/A	Debt, but only following a legal court verdict
Sweden	None	None	Occasional communication problems between the electricity suppliers and the distributions companies.	Debt
Turkey	None	Meter Reading (before switching) Requirement	Eligibility certification of demand aggregated customers	The new supplier refuses the customer in case of existence of an outstanding debt

2.6. Plans and Programmes to Enhance and Ease Up the Switching Process

QUESTION:

- In case there are any projects or concrete plans to develop the switching procedures, please describe them here shortly

Many countries have for the time being completed the implementation of their switching processes. For most of these countries future process changes, whilst likely are not yet planned and depend upon future post-liberalization evaluations. For other countries plans are being developed but are not yet complete. Those plans which are known are summarized below:

The Case of Austria

There is a plan to develop an electronic database for metering point ID and a plan to develop an electronic/automatic switching process.

The Case of Finland

Price transparency:

A proposition for a comprehensive on-line price information and comparison system (for the benefit of households and other small customers), hosted by the Energy Market Authority, has been made. The next step will be the development of the system itself to enable the retail sellers to submit their price information directly to the data base and to prepare the website together with all the necessary IT applications so that the price comparison service can be available to the customers by the end of 2005.

Project on functioning of the electricity market:

As a result of an in-house project some suggestions have been made. The Energy Market Authority considers making a proposition to the Ministry of Trade and Industry to introduce new legislation concerning the Prodat messages. The electricity bills contain very detailed data, causing confusion among the customers since some of them do not find the essential information that is needed for switching supplier. Due to the latest amendment in the Electricity Market Act, the Energy Market Authority has powers to give regulations on the requirements for the content of the bill. This issue will be studied further when the authority is ready to develop new regulations on the matter. Furthermore, the problem of the share of the cost between the supplier and the network operator regarding the data on balance settlement and other metering data (especially consumption place -specified data) needs to be clarified in order to make practices unified. Finally, the possibilities to abandon the 'obligation to supply' system in Finland should be examined.

The Case of France

Ongoing work is taking place, within the "2007 framework" (gte/gtg2007), to, reduce the switching time, improve the possibility of multiple switches by suppliers and review "2004 mechanisms" (gte/gtg2004).

The Case of Great Britain

The Customer Transfer Programme (CTP) seeks to address these issues when they relate to the customer switching experience. The CTP was established in June 2003 following an industry summit; it encompasses suppliers, distributors, transporters and industry bodies including energywatch, ELEXON, Ofgem and Gemserv. The aim of this

programme was to investigate, understand and address the issues faced by customers when they switch suppliers. Throughout the course of the past two years, the CTP has undertaken an extensive project of issue identification and root cause analysis and has produced a number of industry change proposals.

The Case of Italy

In 2005 the regulator launched a monitoring activity to investigate actual conditions in the electricity supply market and competition conditions. Promotion of remote controlled meters is also expected to ease up the switching process.

The Case of Norway

The regulation on metering and settlement etc. will be revised this year (2005). One of the aims in the revision is to reduce the time of a supplier switch from three to two weeks and also make switches possible any day of the week (currently changes must take place on Mondays due to settlement rules and procedures).

Elsewhere, there are plans to simplify suppliers' access to the unique metering point ID's which has been a problem (customers do not always have this readily available when needed).

There are also plans to see if the switching process time can be reduced even further. One possibility is that the customer hands in the meter value together with the contract etc. so that the DSO does not need to contact the customer and do it. This will speed up the switching process.

The Case of Poland

At the beginning of 2005 a Task Force for system changes in the Polish energy market was set up by the government Energy Policy Working Group. One of the main goals of the Task Force is to remove obstacles to grid access and change of supplier. Key objectives include:

- new principles for the balancing market, non discriminatory to TPA customers,
- identification of entities to be responsible for new activities concerning the customer switching process e.g. data administration, meter reading and billing etc.,
- introduction of common procedures for the supplier switching process.

The Case of Portugal

Following the full implementation of total market opening conditions, the switching process will be conducted by the distribution company, according to regulated conditions approved by ERSE. Under the new switching procedures, a new supplier will make every contact with the distribution company on behalf of the customer (except if the customer wants to have a bilateral contract with a generation company or foreign supplier). The metering conditions will be the same as described previously, except in the case of LV customers with contracted power up to 41.4 kW for whom readings will be taken twice a year and consumption estimates will be possible under the terms defined in the Commercial Relations Code. Households will be any time based on estimates.

The case of Romania

Electricity:
ANRE has issued in May 2005 a Customer Switching Procedure. The objective of further improvements of the procedure is to remove most of the barriers for customer switching.

Gas:
Activities are underway to provide information (to those who may need it) on the process of gradual market opening, and the potential advantages for eligible consumers of the possibility to switch supplier.

The Case of Slovenia
A system for easier data interchange will be a component of the metering code that is currently being prepared.

The Case of Spain
A new legal disposition proposal which is in an advance phase will facilitate customer switching.

The Case of Sweden
Communication problems with regard to switching procedures can be reduced if all customers are identified by a unique id, such as an EAN code. The use of EAN codes might soon be a reality. Likewise it might come into force that it must be the same person in the household who is signing both the distribution contract and the supplier contract. Today this is not the fact, and it sometimes causes identification problems.

The Case of Turkey
Through the use of meters with memory storage capacity, the application period for supplier switching will be shorted.

2.7. The Level of Switching Activity

QUESTION:

- How has it been measured and what have been the results?
- Are there any targets for switching activity?

2.7.1. Problems of definition and comparison

Switching is a very difficult construct to measure. The term 'Switching' can refer to the number of meter points no longer being supplied by the same supplier; the number of customers who have changed supplier; the number of customers who are no longer with their incumbent supplier (which does not include those customer who have switched back to their incumbent supplier due to an improved price offer or some other reason); the number of customers who have entered the competitive market by taking a tariff other than the regulated tariff, even if they are still with their incumbent supplier at a price far higher than would be available from other suppliers; the total volume of switches (including multiple switches by the same customers and switch-back to original suppliers); the volume of energy which is no longer supplied by incumbents; the number of switches away from incumbent suppliers (meaning that switches from one incumbent to another are not included) and so on. The list is long. In some cases, switching figures can therefore also include switching which simply results from moving home or business, even though the customer just moves from one local incumbent to another.

To make things even more complicated, switching calculations can come from many sources including DSOs, TSOs, surveys on suppliers, surveys on customers (with varying sample sizes and qualities), including potentially biased sources.

Such information may furthermore be sourced in an obligatory manner (in which case all sources have to co-operate with the collector – e.g. the regulator) or in a voluntary manner (in which case sources may be only partially tapped); the information may not be collected at comparable times of year or in regular intervals; and the collectors of the information are rarely aware of the above mentioned factors which can severely distort the figures that are derived. When presented, supporting explanations are also commonly lacking and it is often unclear not only how the data has been collected but also whether the data concerns gas, electricity or both, and which groups of customers (by usage etc.) it relates to.

Figure 6: Switching Data Collection

	Method of Data Collection & Measurement
Austria	E-Control conducts a yearly data collection from the DSOs
Denmark	Transmission company collects data from the distribution companies
Estonia	N/A
Finland	Regulator, VaasaEMG, surveys and investigations by Finnish Electricity Association (SENER), other sources
France	Distribution system operators transmit statistical information regarding switching to the Regulator. The Regulator publishes a market survey on a quarterly basis.
Great Britain	Customer surverys and industry data
Hungary	Regulator monitors switching activity
Ireland	MRSO measures levels of switching activity and reports to Commission for Energy Regulation on regular basis
Italy	N/A
Latvia	N/A
Lithuania	None
Luxembourg	Not Yet
Netherlands	DTe monitors activity on basis of information from central register
Norway	A sample of the 29 largest grid areas (ca. 130 for distribution in total in Norway) submit data on supplier switches every quarter
Poland	Measured annually by number of eligible customers who change their supplier
Portugal	Regulatory authority produces annual report concerning main developments in electricity market opening - contains some information on switching activity
Romania	Electricity: Planned, Gas: Percentage of switched eligible consumption is collected
Slovakia	N/A
Slovenia	Regulator collects data for switchers as percentage of eligible customers and for switcher consumption as percentage of eligible consumption
Spain	Regulator measures switching quarterly
Sweden	Statistics Sweden gathers information every month about supplier switches. TEMO surveys on customers provide additional information on a seasonal basis
Turkey	EMRA receives report from (turkey's only) distribution company which lists customer figures. In addition there are reports of the Market Financial Settlement Center

The fact is then that there is no consistent definition of switching or method of switching data collection within Europe. Therefore, even those countries which do measure it (not all do) cannot easily compare themselves with one another.

2.7.2. Key switching findings and examples

The very limited results from the questionnaires distributed for this report are summarized in the following examples and tables[12]. Despite the limited information available, it is clear that there are major differences between countries in terms of switching activity and definitions of switching. No countries reported specific targets for switching activity.

The Case of Great Britain

For all customers, including domestic customers, supply competition has produced substantial benefits. Around half of domestic customers have now switched. Around 40% of customers have switched away form incumbents in both gas and electricity (some have returned to their original incumbent supplier) and customer switching rates appear to be stable and at a high level. Concerns that suppliers might focus on retaining existing customers rather than competing for new customers are not supported by Ofgem's analysis. Doorstep selling remains one of the most important ways of attracting new customers, although more and more customers are using the internet to get pricing information. Where customers have not switched supplier, this appears to be because they do not want to, rather than because they are concerned about the transfer process or they are unaware of the opportunities to change supplier and save money. However, large numbers of these customers are entering the market for the first time: over 60 per cent of customers changing supplier are doing so for the first time.

The Case of Austria

In Austria, based on the results of a survey conducted in October 2004, the number of household electricity and gas customer switches to date amounts to 102.000 (2.8% of that market) for electricity and 20,000 (1.6% of that market) for gas. In the market for small and medium enterprises the numbers are 90.000 (6.4%) for electricity and 1.400 (3.4%) for gas. In the combined market the numbers are therefore 199.000 (3.9% for electricity and 21.500 (1.7%) for gas.

The Case of Denmark

20% (by volume) of small and medium customer gas supply switched supplier in first year of full liberalization.

The Case of France

5% (200.000) of the eligible customers have switched.

The Case of Hungary

24% of total consumption has switched supplier to date.

[12] Far more extensive data is available from VaasaEMG based on other researches.

The Case of Italy
The level of switching activity in the gas sector (percentage of customers that have changed their supplier) since complete liberalisation (January 2003) has been estimated by the regulator as: approximately 23% for big consumers (more than 200.000 m3/year); 3% for medium consumers (between 5.000 and 200.000 m3/year) and 1% for small consumers (less than 5.000 m3/year).

The Case of Norway
More than 1.6m household electricity customer switches have taken place (including switch back and multiple switches by the same customers). Considering that the number of household customers (metering points) is only just over 2 million (2.5 million metering points for all customers), this is a high number of switches. The number of commercial customer switches is approximately 190.000.

The Case of Poland
In 2005 just 78 electricity customers switched supplier (10% of Eligible customers).

The Case of Portugal
Approximately 7.500 customers had changed to a supplier within the competitive market by the end of the 1st Qtr 2005 (23% of total 2001 national consumption in the mainland on an annual basis). However, only some of these had changed supplier at least once in the competitive market.

The Case of Romania
Electricity: 31% (58) of the eligible customers have switched.
Gas (as May 2005): 52% (65) of the eligible customers have switched. This equates to 68.51% of the total market in volume terms.

The Case of Sweden (electricity)
According to research by TEMO (autumn 2005 survey), 32% of household electricity customers have so far switched supplier, and 55% have been active either by renegotiating their contracts or switching supplier.

Sometimes, though, there is little alternative to switching:

The Case of Hungary
In Hungary, if an eligible customer chooses to leave the regulated market (and the regulated tariff) and wants to buy electricity in the free market, he has to change his public electricity supplier (public electricity suppliers are obliged to serve public electricity customers at regulated prices, but they are not allowed to sell electricity at free market prices to eligible customers.) Every customer who wants to have a free hand in signing a contract with conditions (and prices) not regulated by the state has to switch.

Because public electricity suppliers cannot serve eligible customers at unregulated prices, most of them decided to establish their own trader subsidiary in order to serve customers in the free market. In many cases, switching means changing from the public supplier subsidiary to this trader subsidiary of the same owner. In such cases (if the owner of the public supplier and the trader is the same company) switching does not mean real competition.

In contrast to the above example, incumbent supplier price-matching can sometimes be seen as a barrier to market activity:

The Case of Finland

By the year 2000 only 2% of electricity users had changed their supplier. In 2002 the figure had increased to about 5% and 2004 to some 11% of household customers. Taking into account the share of negotiated contracts with the local supplier (supplier having obligation to deliver) share of energy sold by non-local supplier or by the local supplier according to the negotiated contracts was in 2004 for household customers 30% and for small and medium-sized commercial users 82%. There has been a steady increase with this share since 2001.

2.8. Other Issues Relevant for Switching

QUESTION:

- Existence of regulated end user prices

2.8.1. The existence of regulated end user prices

Concerning electricity, whilst most countries in Europe in some way regulate distribution and transmission tariffs, in most countries the price of electricity itself is not regulated where eligible customers are concerned. Where the price of electricity is regulated it is only regulated for those customers who have not yet switched supplier or entered the liberalized market by switching to a competitive tariff (e.g. France, Turkey, Romania, Spain) or in those cases where prices are considered unreasonable (e.g. the Netherlands where there is a possibility to regulate prices if the DTe considers prices to be unreasonable).

In Romania, electricity and natural gas customers can furthermore return to the regulated tariff if they request it, by returning to the original incumbent/tariff/DSO. In Ireland, the Commission for Energy Regulation regulates all end user prices offered by the incumbent ESB Customer Supply.

It should be noted, though, that although price regulation is typically seen as a means of preventing prices from becoming too high, the regulations may in fact result (deliberately or not) in prices which are so low as to inhibit competitor's margins and thus their opportunity to compete in the market. For instance, in Lithuania the commodity price of natural gas for regulated consumers is lower than for eligible consumers. Therefore eligible consumers request to change their status and become regulated.

2.8.2. Obligation to supply as a restrictor of switching

It can be argued that if the competitive playing field were truly equal, and if customers were to reside with companies they had chosen rather than been placed with, there would be no default suppliers within liberalized energy markets. The reality is, however, far from this. In general, even an uncompetitive supplier can keep customers simply because the effort for the customer of switching is greater than any benefit which can be realistically derived from switching. Similarly, an uncompetitive supplier can win customers simply because they happen to live in or move to their incumbent area, because they can't think who else to switch to, or because they do not even realize that they can switch.

The Case of Norway

In Norway, if a customer does not have a supplier, they are supplied from the local DSO as an intermediary and thus typically receive high, unregulated prices. Whilst the Norwegian regulator has stated that a maximum limit may be attached to such prices for a few weeks of such supply until customers have time to switch to a supplier), this practice can be seen as (partially at least) solving the above mentioned problem.

Some companies also transfer customers without contract to the local/incumbent supplier to fulfil their "delivery duty". This way of capturing the customers is not allowed, it should be the DSO and not the affiliated company that should supply these customers.

The Case of Finland

In Finland, during the market opening process the customers have not been obliged to actively choose a supplier. Instead, they have been able to avail themselves the possibility to stay with their traditional, pre-liberalisation period supplier and to purchase electricity with the public list prices that the retail suppliers must have for the customers who are encompassed by the obligation to supply.

For every licensed distribution network area there is one electricity retailer, who has the obligation to supply electricity to a restricted group of customers. On the basis of the latest amendment to the Electricity Market Act, these customers are consumers and other electricity users whose main fuse is 3x63 A at the maximum or who buy electricity 100.000 kWh per year at the maximum. It is the retail seller who has the significant market power in that distribution network area that is under obligation to supply. At the beginning of 2005, there were 70 such retailers.

Conclusions

The ERGEG Customer Focus Group undertook to review the major issues affecting customer switching in the retail electricity and gas markets in the ERGEG member countries. The report resulting from the task is based on the answers to the questionnaires submitted by the members of the Customer Focus Group. Accordingly, since the answers concentrated more on the electricity market, this report provides more information on electricity market switching issues than on gas market switching issues.

The timing of the review of the current status of customer switching is interesting because in a number of the ERGEG member countries the electricity and/or gas markets have been opened up for both small and medium-sized customers, whereas in some ERGEG member countries the last steps of market opening are bound to take place by the 1st of July 2007 at the latest (as required by the Electricity and Gas Market Directives, unless a derogation has been granted). Thus, in a number of countries the experiences of market opening and customer switching have already been gained and retail competition throughout the electricity and gas markets has become part of everyday life. According to the results, some further legislative development and corrective measures have been taken to further improve functioning of the markets in this respect. On the other hand, for those countries where retail market competition is to be introduced in the foreseeable future, some good lessons may be learned from the experiences gained in other countries.

The technical side of customer switching – customers switching suppliers – depends on the chosen switching model. Who takes the initiative to change supplier (are customers actively seeking good and low-rate suppliers or is it suppliers that are actively making efforts to win new customers), which parties are involved in it and in which way, and furthermore, how are the interactions between the involved parties carried out? The switching event that results from the chosen model affects the customer, the new and the former supplier as well as the distribution network operator. The smoother and easier the switching process and model is, the more favourable the market environment is for switching. Accordingly, the fewer parties the customer has to contact, the better. This especially applies to the former supplier since the necessity for the customer to contact the former supplier offers the former supplier the possibility to try to win back the customer. These kinds of features can be seen in the experiences reported by some of the ERGEG member countries.

A vital component of the switching model is the way information is exchanged between the customer, retail suppliers and the network operator during change of supplier. Without the utilization of electronic data interchange (EDI), it is not possible to manage large numbers of retail customers switching between suppliers. A standard method of transmitting data is required to enable electronic handling and storage of data without manual intervention, which increases the speed, security and reliability of the data transmissions and ensures that the stored information is correct. EDI is also important for the speed of switching processes and its efficient use shortens the time to carry out a switch. EDI is being used in a number of countries and its use will spread to non-user countries since this seems to be the cornerstone of switching from the technical point of view. To integrate national retail markets, it would seem to be a natural requirement that the EDI systems used in different countries should be compatible with each other.

When energy is supplied by a supplier other than the local exclusive supplier, the importance of measuring the energy used by the customers becomes crucial. The costs of hourly or interval metering of energy are recognised and are usually too high for small customers consuming

relatively small amounts of electricity or gas. If required as a prerequisite to switching supplier, the metering requirements can make an obstacle to competition in certain retail market segments and make the incumbent supplier the only source of supply. This problem has been solved in several countries by introducing a load profile system where the load profile (area or category profile) represents the average consumption profile of those customers who are not hourly or interval metered. However, the development of metering technique will and is already bringing another solution to this as the new techniques of metering are making it possible to cost-efficiently equip even household customers with more intelligent meters. The new metering techniques will also enhance customer switching by enabling the reading of meter values when the switch takes effect.

The road to open electricity and gas markets encompassing all customers has not been totally smooth and there still exist other obstacles to switching than the ones referred above. The obstacles may relate to specific fees charged for switching and balancing, tariff structures, regulated tariff systems and the fundamental issues of energy market structure.

It is very obvious that charges levied on those customers who end up changing a supplier create an obstacle to switching unless the charges are very small compared to the savings that can be accrued through switching. Usually it is the case in the small customer segment of the market that potential savings are not that big and charges may eat up the expected saving thus lowering the incentive to switch. Accordingly, to ensure that small customers are able to benefit from the market opening and that they do not become captive customers of the incumbent suppliers, it is important that the costs of market opening are spread among all the customers – not just those who are active and create the real competition among the suppliers. It is all the customers that benefit from the existence of active customers as the latter ones create the competitive pressure, which guarantees competitive prices in the market.

Tariff structures and regulated tariffs may also hinder switching. Network tariffs must be equal and non-discriminatory to all customers using network services regardless of the origin of energy purchased. In some countries the old pre-liberalization phase tariffs that formerly included both energy and network services and which since liberalization have just been split between those two services, have created an obstacle to switching. To change energy supplier would mean accepting a new network tariff less favourable than the old one – the old one not being available for new network contracts – and the end-result would be a higher total price after the switch. Similarly, and maybe more widely, the existence of regulated tariff systems has slowed down the switching process. Either the regulated tariff systems may make the customers passive as they do not have to make active choices between suppliers or the regulated tariffs have been artificially low thus making it impossible for new suppliers to gain customers.

Finally, a major obstacle to switching can be market structure. In case there is only one retail supplier or one wholesale supplier supplying the few retail suppliers, there may not be any variation in energy prices to give sufficient incentive to customers to switch. In this respect, it is vital that market integration spreads to the retail market from the wholesale market.

The level of switching activity varies a lot among the ERGEG member countries and it is difficult to draw exact conclusions about it. Firstly, not all the countries systematically collect information on switching activity. Secondly, the definition of switching activity and the nature of information collected differs greatly among the countries. What is obvious is that some of the early market openers are the forerunners in switching activity, which is very natural. What is clearly needed is a common definition(s) of switching activity and a wider and coordinated practice of

systematically collecting information on switching activity. This requirement applies at least as long as the electricity and natural gas markets are still taking their early steps of market opening and the perceived levels of switching activity can produce important information on the potential problems in electricity and gas markets.

Appendix I: Questionnaire Sample

ERGEG Customer FG

Questionnaire on Customer Switching Process

13-04-2005

1. Overview of the pre-liberalized situation

- Existence of regulated end user tariffs, frequencies of meter reading and billing, accepted payment methods, Ownership of the meters, timetable allowed for enabling eligibility

2. Customer switching process

- Description of the process: How the process is initiated, whom the customer contacts, which are the next steps Description of the process for a new supply, for a change of supplier or for a cancellation. (Please describe here the processes of switching for a customer, who is connected to the distribution network level, i.e. household or a small or medium-sized enterprise).
- Meter reading and billing frequencies
- The access to and use of consumption estimates in the switching process
- Payment methods accepted
- Time for carrying out the switch

3. Metering requirements

- The requirements for metering for customers connected to the distribution network
- The use of load profiles (what kinds of load profiles are used)
- The introduction of new metering techniques and their impact on switching process

4. Electronic data interchange

- What kind of systems are there in place for data interchange between suppliers and distributors (as electronic data interchange systems must be in place to allow large number of customers to switch their supplier)
- Basic information in the database (ref. number of the supply point, power contracted, etc)
- Information to be made available and subjected to be exchanged to consumers and suppliers

5. Obstacles for customer switching

- Are there any charges for switching the supplier?
- Are there any rules or regulations that hinder or slow down the process of switching?
- Are there any reported "bad" practices used by the companies to hinder or slow down the process?
- Are there any reasons to refuse customer switching?
- The treatment and role of outstanding debts when assessing a request to switch a supplier?

6. Plans and programmes to enhance and ease up switching process

- In case there are any projects or concrete plans to develop the switching procedures, please describe them here shortly

7. The level of switching activity

- How has it been measured and what have been the results?
- Are there any targets for switching activity?

8. Other issues relevant for switching

- Existence of regulated end user prices